

**BY ORDER OF THE COMMANDER
CHARLESTON AIR FORCE BASE**

**AIR FORCE INSTRUCTION 11-2C-17,
VOLUME 3**



**CHARLESTON AIR FORCE BASE
Supplement**

12 MAY 2010

Operations

C-17 OPERATIONS PROCEDURES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available for downloading or ordering on the e-Publishing website www.e-publishing.af.mil.

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: 437 OG/OGV

Certified by: 437 OG/CC
(Colonel Joseph W. Mancy)

Pages: 25

AFI 11-2C-17V3, *C-17 Operations Procedures*, dated 15 December 2005 is supplemented as follows: This supplement applies to all personnel assigned or attached to the 437th/315th Airlift Wings (AW). This publication applies to Air Force Reserve Command (AFRC) Charleston-assigned Units. This supplement implements AFPD 11-2, *Aircraft Rules and Procedures*. It defines and implements specific procedures and policies applicable to all C-17 crew members in the 437th and 315th AWs. This supplement applies to all C-17 and Aeromedical Evacuation Squadron (AES) aircrew members assigned or attached to the 437th and 315th AW. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gcss-af61a/afrims/afrims/>. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF IMT 847, *Recommendation for Change of Publication*; route AF IMT 847s from the field through the appropriate functional's chain of command. This publication may not be supplemented at any level.

1.4.2.4. (Added) The 315/437th Operations Group Commander (OG/CC) is the waiver authority for AFI 11-2C-17V3, Charleston AFB Sup. Submit waivers through OG Standardization/Evaluation (OGV) to the respective OG/CC in accordance with the OG Waiver Process Guide located on the OGV web page.

1.4.2.5. (Added) It is imperative that crews on operational missions relay all information of unusual occurrences, aircraft damage, or waiver requests through their squadron operations officer and/or stan/eval offices. The pilot in command (PIC) shall consult with home station OGV for aircraft system problems prior to calling AMC to request a waiver. 437/315 OG/OGV personnel are on call 24/7 and can be contacted through Charleston AFB Command Post. Ensure any waiver number received is documented in the AFTO Form 781A, *Maintenance Discrepancy and Work Document*.

1.8.1. (Added) 437 OG personnel will submit all AF IMT 847s through their respective flying squadron stan/eval office. 315 OG personnel will submit all AF IMT 847s through 315 OG/OGV.

2.2.2. (Added) 437 AW units will submit all OST requests IAW the Charleston AFB Wing Operations Plan (WOP), Part I. 315 AW units will submit all OST requests through 315 OSS/OSO.

2.5.6.1. (Added) The PIC (or designated crewmember) will report the aircraft maintenance status (Alpha 1, 2, or 3) to the C2 agency during the 30-minute out call. Ensure all engine-related maintenance issues that may require an engine run spot are identified to the controller on initial contact (e.g. engine SOV failures, thrust reversers, etc.).

2.9.1. (Added) Aircrews will contact their squadron operations officer if selected for an unplanned Phoenix Banner, Silver or Copper mission.

2.12. (Added) Training Mission Management.

2.13.1. (Added) Training missions are a valuable resource. The PIC will coordinate with Charleston AFB Command Post and/or their respective squadron operations officer as indicated below prior to changing or cancelling any training mission.

2.13.1.1. (Added) Training Cargo/Airdrop Load Cancellation. Schedulers will coordinate all training/airdrop loads with current operations the day prior to scheduled mission execution. Once the cargo load appears on the Air Order of the Day (AOD), the training cargo should fly with the aircraft. Aerial Port Squadron (APS) will not normally download an aircraft prior to flight unless an aircraft tail or crew change occurs that necessitates download.

2.13.1.2. (Added) Delays for Maintenance Discrepancies. The PIC will advise command post immediately of any maintenance discrepancy that may preclude an on-time departure of the primary or subsequent training mission. If required, ensure command post notifies the tanker unit of the delay.

2.13.1.3. (Added) Cancellations for Weather/Maintenance. If weather or maintenance causes the PIC to request a training mission cancellation, the PIC will coordinate their request through their respective flying squadron operations officer and then contact command post for final approval. The 437/315 OG/CC (or designated representative) is the approval authority for training mission cancellation. The crew is not released until notified of the cancellation approval by command post.

2.13.1.4. (Added) Changing or Cancelling North Auxiliary Air Field (NAAF) Times. During the planning day for the local mission, the PIC will contact the OSS training bookie (x5554) during duty hours to amend NAAF time. After alert, the PIC will coordinate changes or cancellations through command post or directly with NAAF if changes occur in-flight. When using command post to relay NAAF changes, be explicit and directive with the command post controller, i.e., "Call North CCT and cancel/change my North Field times to..." Prompt notification of changes/cancellations is important in order to permit NAAF controllers to maximize NAAF operations.

2.13.1.5. (Added) Extending Training Missions. Command Post, after conferring with MOC and AMXS, is the approval authority for extending any training mission beyond the scheduled termination time annotated on the daily AOD. The PIC will not extend any training mission beyond the scheduled termination time without proper approval.

2.13.2. (Added) Departure Prioritization. Local training missions should yield to scheduled operational mission departures, local airdrop missions and any mission with a controlled departure time.

2.13.3. (Added) After landing, the PIC will advise command post of total flying time, training completion status and reason, if incomplete. A training mission is considered incomplete when the training not accomplished will generate a requirement for another training mission (e.g., tanker cancellation, upgrade non-recommend, no assaults due to wet runway at NAAF, etc.).

2.14. (Added) Air Refueling Mission Coordination. Prior to departing on any mission segment (operational or training) with a scheduled air-to-air refueling, the PIC will contact the appropriate C2 agency to verify tanker status (if known).

3.2.4. (Added) Excess Crewmembers. Squadron operations officers will request approval from OSS/OSO prior to manning any mission with more than seven crewmembers, including Mission Essential Personnel (MEP) and Additional Crew Members (ACMs). If OSO has not received and approved a request, extra crewmembers may be turned away due to mission requirements. During mission execution, coordinate last minute requests for ACMs/MEGPs through appropriate C2 agencies.

3.2.5. (Added) Special Airlift (SA) Mission Management.

3.2.5.1. (Added) SA missions consist of those missions planned by 437 OG/OGA and generally fall into two categories, embassy support or "specials." Squadron commanders and operations officers are vested with SA program supervision within their squadron. Squadrons will only schedule crew members who are approved by the squadron commander/operations officer on SA missions.

3.2.5.2. (Added) All SA missions require augmented crews. The primary crew will consist of three pilots and two loadmasters. Squadrons will coordinate requests for additional crew members with 437 OG/OGA. The following restrictions apply to SA mission manning:

3.2.5.2.1. (Added) The PIC and the primary loadmaster will be SA-certified.

3.2.5.2.2. (Added) For embassy support missions, the second pilot will be an aircraft commander as a minimum.

3.2.5.2.3. (Added) The third pilot should be of sufficient experience as to handle the various nuances which characterize a SA mission.

3.2.5.2.4. (Added) The above requirements may be waived on a case-by-case basis for short notice and/or “special” SA taskings. 437 OG/CC has delegated waiver approval for these requirements to 437 OG/OGA.

3.2.5.3. (Added) Prior to operating as the PIC or primary loadmaster on a SA mission, the crew member will meet/accomplish the following requirements:

3.2.5.3.1. (Added) The PIC will be certified as an instructor aircraft commander.

3.2.5.3.2. (Added) Will receive a SA mission brief from 437 OG/OGA.

2.12.3.3. (Added) Will operate as a primary crew member on a SA embassy support mission.

3.2.5.3.4. (Added) Will be certified as a SA crew member by the squadron commander. Squadrons will annotate SA mission certification on the squadron letter of Xs.

3.2.5.4. (Added) Flight evaluations are not normally authorized on SA missions. However, depending on the nature of the mission, 437 OG/CC may approve evaluations on certain mission segments. Forward evaluation requirements through 437 OG/OGA to 437 OG/CC for approval.

3.2.5.4.1. (Added) MAJCOM evaluators have 18 AF/CC and AMC/A3 authority to administer evaluations on all 618 TACC controlled missions. PICs will notify 618 TACC/XOOL that a MAJCOM evaluator will be administering an evaluation.

3.2.5.5. (Added) All embassy support missions will include a tasking for alternate crew members. The alternate PIC and loadmaster will be SA-certified. Squadrons will ensure alternate crew members are available for the same period as the primary crew tasking. The alternate crew will attend all planning events and pre-mission briefings and will enter crew rest for BRAVO alert at the same time as the primary crew enters crew rest for the SA mission. The alternate crew members will remain on BRAVO alert for 48 hours or until the primary mission departs Andrews AFB, whichever occurs earlier.

3.10.6.1. (Added) FCCs accompany aircraft solely to facilitate and expedite movement through stations with little or no C-17 support. They should not deploy on missions scheduled for normal enroute locations where adequate support exists. Planners will reference HQ AMC/A4 FCC Matrix for locations that require an FCC.

3.10.6.2. (Added) FCCs normally remain with aircraft that become non-mission capable. If the aircrew is subsequently scheduled to depart on a different aircraft, the PIC will coordinate with 618 TACC to determine whether or not the FCC should remain with the crew.

3.11.1.6. (Added) Deadhead Crew Alerts. Deadhead crew members are normally alerted with the primary crew. Deadhead crews will contact the command post not later than 2 hours prior and arrive at the aircraft not later than 1 hour prior to the scheduled mission departure time. 3.13.1. **Standby Force Duty.** ALFA/BRAVO Standby Launch Procedures. Charleston AFB ALFA and BRAVO standby aircrew procedures are contained in Part I of the Wing Operations Plan (WOP).

3.17.1. (Added) 437 AW units will process MEP requests through Aircrew Stan/Eval (OG/OGV) for OG/CC approval. A sample MEP request letter is available on the OGV web site. The Command Post may also verbally request OG/CC approval for “short notice” MEP requests after normal duty hours and on weekends.

3.17.2. (Added) 315 AW units will process MEP requests IAW 315 AW Instruction 11-401, *Mission Essential Ground Personnel (MEGP) Requests*.

3.17.3. (Added) Manifesting MEPs. The loadmaster will manifest MEPs on DD Form 2131, *Passenger Manifest*, complete the anti-hijacking inspection, and ensure the manifest is turned in to the ATOC representative or ramp controller at each station prior to departure. When the total number of MEPs and crewmembers is greater than seven personnel, the PIC will coordinate with the appropriate C2 agency in order to assess the impact to cargo and follow-on mission requirements.

3.17.4. (Added) Prior to an aircrew self-manifesting MEP passengers, the PIC will ensure the MEP status has been properly approved.

3.17.4.1. (Added) Ensure each individual has valid travel orders (if departing the local area) with an MEP approval statement in the remarks section (e.g., “MEP status authorized by 437 OG/CC on mission AJG 12345 from 1-7 Oct 2003”). For local missions, a 437/315 OG/CC approved MEP letter is required.

3.17.4.2. (Added) If an MEP does not have the required documentation, aircrews will contact Charleston Command Post to determine MEP status and obtain a copy of the endorsed approval memorandum, if available. During normal duty hours, aircrews may also contact OG/OGV. If an approval memorandum is unavailable, then the individual’s unit must be contacted to obtain valid travel orders.

4.3.7. (Added) It is imperative that crews on operational missions relay all information of unusual occurrences, aircraft damage, or waiver requests through their squadron operations officer and/or stan/eval offices. The pilot in command (PIC) shall consult with home station OGV for aircraft system problems prior to calling AMC to request a waiver. 437/315 OG/OGV personnel are on call 24/7 and can be contacted through Charleston AFB Command Post. Ensure any waiver number received is documented in the AFTO Form 781A, *Maintenance Discrepancy and Work Document*.

5.12.7. (Added) Monitoring/Assessing CRM

5.12.7.1. (Added) During the mission pre-brief, the PIC will appoint an individual crewmember to assess CRM throughout the mission. Aircrews are encouraged to use the IMT Form 4031, CRM Skills Criteria Training/Evaluation Form, as a guide to enhance their CRM.

5.12.7.2. (Added) The PIC will debrief notable CRM events following the completion of each sortie/mission, including local training sorties. Each crewmember should discuss and critique crew coordination and the process used to make decisions.

5.16.4. (Added) Charleston AFB Block-In/Out Procedures.

5.16.4.1. (Added) Aircraft will not normally block in/out without a marshaller (i.e. maintenance and/or aircrew).

5.16.4.2. (Added) The painted boxes adjacent to each parking spot on the CAFB parking ramp provide for 10-foot wingtip clearance. Wing walkers are required if maintenance stands and support equipment are not positioned within the painted boxes.

5.16.4.3. (Added) Wing walkers are required when blocking in/out of local parking spots when visibility is restricted (i.e. weather).

5.18.4.1. (Added) Charleston AFB Local Fuel Jettison Area. The CAFB local fuel jettison area is defined as the northwest corner of W133 /134 or approximately the CHS 180/21. Crews will ensure they are clear of the coastal land mass either visually, or via RADAR before commencing fuel jettison. The minimum altitude for a controlled fuel jettison is 10,000 feet AGL. If circumstances prevent aircraft from utilizing the designated fuel jettison area, crews will make every effort (within safe operation limits) to jettison away from congested areas or water supply sources.

5.18.4.2. (Added) Fuel Jettison Procedures. Circumstances permitting, the PIC will coordinate with Charleston Departure/Approach Control the altitude and airspace required to accomplish fuel jettison. Aircraft will jettison from the highest practical altitude within the designated airspace utilizing prescribed T.O. guidance.

5.20.1. (Added) Bird Watch Condition (BWC) definitions and guidance are found in AFI 91-202, AMCSUP1, *USAF Mishap Prevention Program*, and *CHARLESTONAFBI 91-202, BASH Reduction Program*. Crews will obtain BWC, if available, prior to initial departure from, or arrival into, all airfields. Crews will immediately notify tower, base ops, or command post of any observed bird activity that may present a hazard for other aircraft. If crews observe or receive notification of bird conditions worse than the last identified BWC, they will follow guidance for the more restrictive condition.

5.20.2. (Added) The Charleston AFB BASH Phase II period is implemented by the 437 OG/CC and coordinated with 315 OG/CC. OGV will announce BASH Phase II periods via FCIF. During BASH Phase II, aircrews should be especially aware of increased bird activity and bird strike risks along migratory routes.

5.20.2.1. (Added) Charleston AFB BASH Phase II Restrictions. The following restrictions apply to the local Charleston AFB flying area during BASH Phase II periods:

5.20.2.1.1. (Added) Crews will not accomplish any takeoffs, landings, transition/pattern work, or airdrop operations below 2,500 feet AGL during the period from one hour prior to one hour after sunrise and sunset. **EXCEPTION:** Current operations may schedule mission essential operations during the period with OG/CC approval. Missions approved by the OG/CC for initial departures or final landings during the restrictive period are annotated as “approved” on the AOD.

5.20.2.1.2. (Added) NAAF is closed during the period from one hour prior to one hour after sunrise and sunset. **EXCEPTION:** Airdrop operations above 2,500 feet AGL.

5.20.2.1.3. (Added) Crews will fly enroute/low-level altitudes above 2,500 feet AGL at all times, day or night. This restriction does not apply to the airdrop run-in through escape. **EXCEPTION:** The OG/CC delegates approval authority for low-level operations to the squadron operations officers. Operations officers will determine the absolute minimum required low-level training and may approve low-level operations necessary for currency or to meet evaluation/upgrade training requirements.

5.20.4.1. (Added) During planning, crews will review the Bird Avoidance Model (BAM), Avian Hazard Advisory System (AHAS), and other published regulatory guidance (AP/1, NOTAM, IFR Supplement, etc.) providing bird conditions and restrictions. Crews will plan BASH flight restrictions based on the results of this data. If required, the PIC will address the potential effect of any forecast bird conditions for the mission with the operations officer to determine the absolute minimum required training for the sortie.

5.20.4.2. (Added) In execution, crews will apply BASH flight restrictions based upon current observed conditions, reported BWC, if available, or other regulatory guidance (AP/1, NOTAM, etc.). Crews will utilize the latest BAM/AHAS data as an awareness tool while flying on low level routes or in the vicinity of airfields without BWC reporting capability. **NOTE:** Bird Watch Condition (BWC) codes are based on observations of local airfield bird activity and are independent of BAM or AHAS risk hazard levels.

5.20.4.2.1. (Added) Military Training Route and Airdrop Restrictions based on AHAS (see paragraph 5.20.2. for restrictions during BASH Phase II).

5.20.4.2.1.1. (Added) AHAS Bird Risk Low. No restrictions. Maintain vigilance.

5.20.4.2.1.2. (Added) AHAS Bird Risk Moderate. Crews will fly no faster than 250 knots on affected route segments.

5.20.4.2.1.3. (Added) AHAS Bird Risk Severe. The PIC will obtain OG/CC approval prior to commencing any flight on affected route segments. If approved, crews will fly no faster than 250 knots and no lower than 1,000 feet AGL during the day, or 2,500 feet AGL at night on affected route segments.

5.20.5. (Added) The PIC will immediately report all bird strikes to the nearest C2 facility to ensure appropriate maintenance and safety personnel are available upon arrival. Enter all bird strikes into the AFTO Form 781, whether or not they caused damage. Complete an AF Form 853, *Air Force Bird Strike Report*, for all bird strikes as soon as possible after landing. Complete an AMC Form 97, *AMC In-Flight Emergency and Unusual Occurrence Worksheet*, for all damaging bird strikes as soon as possible after landing, and ensure proper notification to Wing Flight Safety (437 AW/SEF). Fax copies of AF Form 853, AMC Form 97 (if applicable), and crew orders to 437 AW/SEF at DSN 673-4030. 315 AW aircrews will additionally courtesy copy 315 AW/SE via fax DSN 673-7060. Retain original copies of AF Form 853, AMC Form 97 (if applicable), crew orders, and all pre-flight mission planning documents for at least one duty day.

5.21.2. (Added) Charleston AFB aircrew are not normally qualified or allowed to perform FCFs. Aircrews will contact 437 OG/OGV for guidance if tasked to perform an FCF by an outside agency. Reference the 437/315 OG/OGV Functional Check Flight Process Guide for further guidance.

5.22.1. (Added) 437/315 OSS/OSO is the OPR for coordination of air shows/flyovers or demonstrations with the user(s) and higher headquarters. PICs will receive a briefing from OSS/OSO for all aerial events.

5.22.2. (Added) Operations officers will select appropriately qualified crew members for air show/flyover taskings. Only certified aircrews will perform Aerial Demonstrations. Reference 437/315 OG/OGV Aerial Demonstrations/Static Displays Process Guide for further guidance.

5.34. (Added) Aircraft Auxiliary Power Unit (APU) Usage Policy. The following procedures are designed to conserve fuel during ground operations. While this is Charleston AFB local policy, aircrews are expected to follow these procedures at enroute locations to the maximum extent possible.

5.34.1. (Added) Pre-flight.

5.34.1.1. (Added) Maintenance (MX) will provide a power cart at every jet at crew show or Aerial Port Expeditor (APEX) loading time (whichever is earlier) and should have the aircraft powered up with external power. MX will also provide an air conditioning/heater unit (if available) when outside air temperature is less than 50F or greater than 80F. *Note:* To avoid overheating the avionics, MX will connect heater units to the aircraft via hatches/doors only.

5.34.1.2. (Added) If no powered Aerospace Ground Equipment (AGE) is available, the aircrew will query Command Post/MOCC and request AGE support immediately. The aircrew will delay preflight until arrival of external power. In the event of delayed departure, C2 will assign late take-off delay codes to MX. *Note:* When temperatures require an air conditioning/heater unit and inventory does not allow supporting all aircraft in the launch/recovery sequence, the aircrew may start the aircraft APU as necessary for avionics cooling.

5.34.1.3. (Added) Aircrew will start the APU approximately 15 minutes prior to engine start to accomplish SCEFC and FCC Hyd preflight test.

5.34.1.4. (Added) Aircrew will request disconnect of external power after Copilot Interior Inspection preflight checklist completed (approximately stations time).

5.34.1.5. (Added) Aircrew will shut down the APU immediately after engine start IAW T.O. 1C-17A-1.

5.34.2. (Added) Post-flight.

5.34.2.1. (Added) After landing, the aircrew will delay APU start until approximately 4 minutes from block in.

5.34.2.2. (Added) At block in, aircrew will shut down engines IAW T.O. 1C-17A-1 guidance.

5.34.2.3. (Added) MX block-in crew will connect external power immediately after engine shutdown. Maintenance will also connect air conditioning/heater unit when temperature requires (<50F or >80F).

5.34.2.4. (Added) The aircrew will shutdown the APU after external power (and air/heater cart when required) is connected.

5.34.2.5. (Added) If an external power cart or air unit is unavailable, and after all passengers and cargo are safely downloaded, the aircraft will be depowered (black jet), safety considerations permitting. Aircraft will not remain powered (APU running) while only awaiting AGE.

5.35. (Added) Chocks and Grounding Wires . Ensure chocks and grounding wires are onboard the aircraft for all missions departing Charleston AFB and that the same chocks/grounding wires are returned to Charleston AFB.

5.36. (Added) Charleston AFB Engine Run Policy.

5.36.1. (Added) There are two types of maintenance engine run power requirements: idle and power (any setting above idle). All parking spots are approved for idle power engine runs. If required to accomplish a power engine run, the PIC will coordinate with command post and MX for the proper parking location.

5.36.2. (Added) Maintenance will coordinate all maintenance engine runs and runway closures IAW CAFB engine run policies (see CAFB 21-301, *Aircraft Engine Run Policy*). The PIC will notify ground/tower prior to commencing the power engine run and maintain radio contact with command post and ground/tower throughout the engine run.

5.37. (Added) Engine Running Crew Change (ERCC) . Aircrew members who plan to deplane a local training mission prior to mission termination or enplane after initial departure will make arrangements with the PIC and the operating squadron prior to mission execution. Conduct ERCCs on the parking spot designated on the AOD or as determined by command post. The PIC will notify command post of all planned crew changes.

5.38. (Added) Taxi/Runway Cautions at Charleston AFB.

5.38.1. (Added) Aircrews will exercise extreme vigilance while taxiing on taxiway "G" adjacent to the Fixed Base Operations (FBO). Deplane wing-walkers as required and use caution to avoid entering the FBO ramp.

5.38.2. (Added) When entering runway 21 from taxiway A, use caution for jet blast due to small aircraft parked around the FBO maintenance hangar.

5.38.3. (Added) For all runways at Charleston AFB, make 180 degree turns between the distance remaining markers to eliminate/reduce sign damage.

5.39. (Added) Crew Bus Backing Operations Around Aircraft . CHARLESTONAFBI 24-301 requires two spotters when backing a crew bus in vicinity of the aircraft for on/off-loading. The spotters will monitor clearances between the vehicle and aircraft, and have direct visual contact with the driver. Brief the vehicle driver on the hand signals used. Pre-position a chock when the vehicle is within 25 feet of the aircraft and do not back the bus closer than 10 feet of the aircraft.

5.40. (Added) Lightning Procedures.

5.40.1. (Added) General. The 28th Operational Weather Squadron (OWS), Shaw AFB, or local Weather Flight will disseminate weather watches, advisories, and warnings. Current standards require Air Force personnel to cease outside activities and seek shelter when a lightning warning is issued.

5.40.2. (Added) Aircrew responsibilities for Lightning Warnings and Watches.

5.40.2.1. (Added) Lightning Watches. Lightning watches are issued 30 minutes prior to lightning within 5 nautical miles (nm) of the airfield.

5.40.2.1.1. (Added) Aircraft Operations. There are no specific procedures for lightning watches, but a lightning watch is an important factor in planning the sequence of events for departure. Aircrew wishing to depart before the lightning passes through the area should plan to finish all ground operations (including engine start and block-out) within 30 minutes. If aircrew cannot block out within 30 minutes, be prepared to cease operations as soon as lightning is within 5 miles of the field. If the crew desires transportation to an alternate shelter, they should request transportation well before lightning reaches within 5 miles of the airfield.

5.40.2.2. (Added) Lightning Warnings. Lightning warnings are issued for lightning within 5 miles of the airfield. Most flight line activities (maintenance, refueling, etc.) will cease with the exception of aircraft taxi and some motor vehicle operations.

5.40.2.2.1. (Added) General. The PIC will not deplane passengers or crewmembers during a lightning warning. **EXCEPTION:** Situations may arise when the hazard and risk associated with personnel remaining on the aircraft outweigh the risk associated with lightning. The PIC maintains authority to make appropriate time-critical, life and death decisions. Examples include aircraft fire/smoke/fumes in the aircraft, extreme aircraft induced health hazards, etc. Contact command post for immediate fire, medical, or transportation assistance. Non time-critical, situations will be approved by the Wing Commander on a case by case basis; use Command Post to request approval. Under no circumstance will aircrew deplane the aircraft during a lightning warning for simple convenience or comfort.

5.40.2.2.2. (Added) Aircraft Operations Before Takeoff. Crews should remain in contact with the local weather service to remain aware of approaching thunderstorms. Do not start aircraft engines during a lightning warning. If the aircraft engines are already running, and the crew is advised of an impending thunderstorm, they should attempt to depart the airfield if possible, while complying with all technical orders and AFIs. If departing the airfield is not possible, all personnel will remain inside the aircraft. Extended engine operation during the period of the lightning warning is at the PIC's discretion.

5.40.2.2.3. (Added) Aircraft Operations After Landing. Crews should remain in contact with the local weather service to remain aware of approaching thunderstorms. If a lightning warning is issued after landing, the PIC will coordinate with command post for a parking spot that does not require a block-in crew. If one is not available, the aircraft commander will position the aircraft at an appropriate temporary location on the airfield. Do not deplane a crewmember for block-in or engine shutdown. Extended engine operation during the period of the lightning warning is at the PIC's discretion.

6.2.1.1. (Added) Squadrons will identify crewmembers departing on missions outside the CONUS without a valid passport on the IMT 4327a, *Flight Authorization (PA)*. Any crewmember without a passport will carry AF Form 1631, *NATO Travel Orders*, completed IAW AFI 65-103, *Administrative Orders (PA)*, when scheduled on missions transiting European bases. In addition, squadrons will notify OSO of any crewmember without a passport. OSO in turn will make an appropriate remark in GDSS.

6.2.6.1.4. (Added) Crewmembers will check the equipment inspection date on aircrew helmets and oxygen masks to ensure it will not expire prior to mission completion.

6.2.6.1.5. (Added) Crewmembers who are not permanently issued an oxygen mask or CRU-60 connector will obtain these items from Aircrew Flight Equipment (AFE) prior to the mission (if required). AFE will fit all individual equipment prior to use.

6.2.6.1.6. (Added) Crewmembers will utilize helmet bags to transport helmets and oxygen masks. The helmet, mask and gloves are the only items authorized to be stored inside helmet bags. Crewmembers may utilize the outside pockets to store personal items.

6.2.6.2.1. (Added) Return all life support equipment (i.e. Helmets, NVGs, AERPS, etc.) to AFE immediately after mission completion (including local training missions). Crewmembers will utilize the storage lockers located just inside the AFE front doors when returning equipment after normal duty hours. Fill out the sign-in log located on a clip board hanging on the side of the lockers.

6.2.6.2.2. Crewmembers will report all component malfunctions to AFE upon return.

6.2.9. (Added) AF Form 1199, *Restricted Area Badge*.

6.2.10. (Added) AF Form 523, *Authorization to Bear Firearms*.

6.2.11. (Added) Headset.

6.2.12. (Added) Nomex Flight Gloves.

6.2.13. (Added) Approved flight boots.

6.2.14. (Added) Concealed type holster (when departing the local area).

6.2.15. (Added) Tape measure and calculator (loadmasters).

6.2.16. (Added) Military ID/Common Access Card (CAC).

6.3.16. (Added) Immunization and Preventative Medicine. PICs will consult the Preventive Medicine Matrix located in the Wing Operations Plan (WOP), Volume I Attachments or Public Health (x6962) prior to overseas departures (if applicable) and should brief all crewmembers and MEPs on potential disease exposure and precautions. Significant disease outbreak threats are posted in the FCIF.

6.4.1. (Added) The PIC will obtain a laptop computer from the ARMO (437 AW) or WOC (315 AW) for each mission. Laptop computers are maintained and kept current by TYBRIN Corporation.

6.6.1. (Added) The PIC will contact their respective OG Intelligence Flight (437 or 315 OG/OGI) to schedule an intelligence pre-mission briefing during regular duty hours. When a mass pre-mission intelligence briefing is required, all available crewmembers will attend. During non-duty hours, notify the command post to call and have the on-call Intel personnel come in and provide the briefing.

6.6.2. (Added) Crew members with items of possible intelligence interest will debrief intelligence immediately upon mission completion. During non-duty hours, aircrews should contact command post to notify standby intelligence personnel to meet the crew.

6.6.3. (Added) Aircrew Tactics Briefing.

6.6.3.1. (Added) 437 AW aircrew will coordinate with their squadron tactics office prior to departing on all overseas missions to determine tactics briefing/defensive system configuration requirements and to receive a tactics binder (as applicable).

6.6.3.2. (Added) 315AW aircrew departing from Charleston (without transiting a preposition location with tactics support) and require SPINS, ACO or other theater specific information will receive a tactics briefing, defensive system configuration requirements and tactics binder (as applicable) from 315 OSS/OSK.

6.7.1. (Added) Global Decision Support System (GDSS) Account. PICs that require download capability of GDSS mission paperwork must have a GDSS account. PICs will coordinate GDSS access (assignment of password) through their squadron current operations. 315 AW crews will coordinate with 315 OSS/OSO.

6.10.5. (Added) Reference 437/315 OG/OGV AFI 11-202, Vol. 2, Ch. 9, CHARLESTONAFB Supplement , Process Guide, Mission Kits, for a comprehensive listing of mission kit contents.

6.11.4. (Added) Local publication kits are used only on unilateral training flights in the local area. Utilize mission publication kits on all flights departing the local area. After each mission, neatly pack and return all kits to Base Operations.

6.13.1.1. (Added) 437/315 AW missions will use the following call signs. Ensure the call sign is entered in the mission computer exactly as indicated in the following paragraphs.

6.13.1.1.1. (Added) Formation (Local): MOOSE

6.13.1.1.2. (Added) Formation/JAATT (Off-station): BASCO

6.13.1.1.3. (Added) Formation/JAATT (Pope AFB): TNCAN

6.13.1.1.4. (Added) Off-Station Trainers: VOLT

6.13.1.1.5. (Added) Special Operations Missions: IMPAC

6.13.1.1.6. (Added) Formal Training Unit Missions: PALM

6.13.1.1.7. (Added) 437 AW only: Single-Ship: LIFTR

6.13.1.1.8. (Added) 315 AW only: Single-Ship: GRITS

6.13.1.2. (Added) For all local flights, use the last two numbers of the mission number listed on the AOD with the above call signs (e.g. 315th AW local trainer, ITS 35, would have a call sign of GRITS 35). **EXCEPTION:** 437/315 AW/CC, AW/CV or OG/CC call signs will be LIFTR/GRITS 01, 02 or 03 respectively.

6.26.3. Life preservers for centerline seats are normally stored in the aircraft storage locker. Sidewall seat life preservers are stored behind the seats. During personnel airdrops, loadmasters should remove life preservers from the sidewall seats and place them in the A-3 bag, unless a life preserver sidewall pouch is utilized. For over water flights, stow the life vests immediately prior to the airdrop.

6.26.5. Aircrew Chemical Defense Equipment (ACDE). When ACDE gear (mini or full D-Bag) is required for a mission, the squadron will fax a copy of crew orders to AFE after the crew list is established. Squadrons will specify whether a mini or full D-Bag is required. Crewmembers without a pre-built ACDE bag should make arrangements at least one day prior to mission departure to avoid a possible mission delay.

6.26.6. Emergency Passenger Oxygen System (EPOS). EPOS units will remain stored in the pouches under the sidewall seats until needed. Store EPOS units for the centerline seats in the aircraft storage locker until needed. Do not store bags of EPOS on the main floor.

6.33.2. Upon mission completion, the PIC will return the master document and appropriate plotting charts to the ARMO (437 aircrew) or WOC (315 aircrew), where they will be stored for a minimum of 120 days.

6.33.3.5. (Added) The PIC will download the mission to disk whenever a navigation anomaly is known or suspected. Annotate each mission history disk with the mission number and date. The mission computer IDENT for each mission history file will use the following naming convention: first and last name initials of the PIC followed by the three-digit Julian day (i.e., JP123). In the event of two mission history download requirements during the same Julian day, append the IDENT with the suffix "B" (i.e., JP123B).

6.57.2. (Added) Approach the dispensers at an angle and use caution to avoid jet engine exhaust. Do not approach the dispensers any closer than necessary to inspect for a hung flare. The deplaned crewmember will check the dispensers in the following order: left forward, left gear pod, right forward and right gear pod.

6.57.3. (Added) Upon notification of hung ordinance, the PIC will initiate the Ground Evacuation checklist and evacuate all personnel to a distance not closer than 600 feet. Immediately notify Command and Control that EOD and the fire department are needed.

6.57.4. (Added) During forms completion, the crew will log in the AFTO Form 781 the number of flares remaining according to the counters.

6.58.2. (Added) Return all classified documents obtained at Charleston AFB to Charleston AFB Base Operations (OSA) or destroy the documents IAW approved methods. If destroyed, complete the applicable paperwork to verify the destruction. If classified documents are obtained from another location, a destruction report, SF 153, COMSEC Material Report, must be sent to the location where the documents were obtained. All personnel will report deviations such as loss, unauthorized disclosure or other possible compromises immediately to OSA or to the nearest COMSEC custodian.

6.59. (Added) Crew Baggage. Crew members should not off-load personal items until all passengers have deplaned.

6.60. (Added) Meal Ready to Eat (MRE) and Bottled Water Accountability . MREs and bottled water are "for official use" and are "accountable" items. For additional information on MREs and bottled water, consult the Wing Operations Plan (WOP) Volume I.

6.61. Charleston AFB No-Hat Areas . The parking ramp and associated taxiways at Charleston AFB are designated no-hat areas (i.e. inside the red restricted area lines and on taxiways/run-up areas).

7.13.8. (Added) All missions transiting the CENTCOM AOR will arm for anti-hijacking. Wear weapons in a holster, concealed at all times to prevent identifying armed crewmembers. **EXCEPTION:** Upon initiation of the Combat Entry Checklist, crewmembers armed for anti-hijacking requirements may transfer their weapon from their concealed holster to the survival vest holster or to a holster worn outside/over combat/survival gear. At the Combat Exit checklist, transfer the weapon back to the concealed holster.

7.13.9. (Added) Aircrews will observe the Laws of Armed Conflict (LOAC) while in the combat zone. Aircrews should not conduct force protection measures with a weapon loaded with hollow point ammunition. Hollow point ammunition is specifically for anti-hijacking protection, while limiting the risk of damage to the aircraft. If weapons are provided to aircrew for force protection against the enemy, use ball ammunition.

8.15. (Added) Charleston AFB Required Forms Completion.

8.15.1. (Added) AFTO Form 781 **ARMS** *Aircrew/Mission Flight Data Document* /**AF Form 664** *Aircraft Fuels Documentation Log*., Aircrews will ensure the AFTO Form 781, , and AF Form 664, are properly completed using the 437/315 AW C-17A Aircraft Forms Guide.

8.15.2. (Added) CAFB Form 212, **Aircrew Mission History**. Charleston AFB crews will complete a mission history for all missions. 437 AW crews will use the CAFB Form 212 and return it to the ARMO upon mission completion. 315 AW crews will complete the 315 AW Form 0-7 for all missions including local trainers. Reserve crewmembers flying with active duty aircrews will complete the 315 AW Form 0-7 and turn in to the 315 AW WOC.

8.16. (Added) DD Form 2796, **Post Deployment Health Assessment**. Public Health regulations require a DD Form 2796 be completed by all aircrew members OCONUS for “30 continuous” days or greater at locations that do not have a permanent US military treatment facilities. The DD Form 2796 is available in off-station trip kits. Aircrew members meeting the above criteria will complete the form and return it to Public Health. For aircrew performing flight duties at several locations while OCONUS, the “Deployed Unit” and “Deployment Location” may be left blank, but mark all regions that apply in the “Location of Operation” field. Any questions on proper completion of the DD Form 2796 should be directed to Public Health (x6962).

8.17. (Added) Tactics After-Action Report (TAAR). TAARs are designed to create a forum for aircrews to share lessons learned from exercises and tactical events. Mission commanders involved in major exercises, deployments involving tactical operations, or involvement in a valid AMC-conducted tactics development and evaluation flight (TD&E) should complete a TAAR and email it to 437oss.tactics@charleston.af.mil. TAARs should contain a general synopsis of the exercise or event to include; unit, date of event, point of contact information, a detailed description of the event and mission commander summary, threats, battlefield situation, tactics attempted, results and problems encountered, any applicable analysis, and recommendations and observations to include changes to existing tactics, invalid tactics or areas which require tactics development. TAARs containing classified information and above should be mailed to 437ossosk@charleston.af.smil.mil. Aircrew can view previous TAARs on the tactics website under “JA/ATT”, “After Action Reports”.

9.5.3. (Added) Additional 437 AW Training Guidance. **Note:** 437 AW ONLY. The 315 AW will delineate MPD restrictions on 315 AW ORM worksheet.

9.5.3.1. (Added) To allow mobility pilot development (MPD) pilots time to gain experience, the following training restrictions apply (reference the Table of Allowable Maneuvers):

9.5.3.1.1. (Added) MPD pilots will not accomplish day/overt night assaults to an assault runway, NVG assaults to an assault runway, or air refueling training/contacts with less than 400 hours (PAA) in the aircraft.

9.5.3.1.2. (Added) When two MPD pilots are used to augment a crew, at least one of the MPD pilots will have at least 400 hours (PAA) in the aircraft.

9.5.3.1.3. Squadron Commanders may waive the above training restrictions for MPD pilots cross training from another MWS, OSA/VIPSAM, and FAIPs.

9.6.3. (Added) NVG Ground Ops at Charleston AFB.

9.6.3.1. (Added) The following procedures apply to all NVG operations at Charleston AFB:

9.6.3.1.1. (Added) Accomplish NVG ground ops on taxiway K or the hot cargo area.

9.6.3.1.2. (Added) Indicate "KCHS NVG operations" in the Remarks section of the DD 175.

9.6.3.1.3. (Added) Contact base operations and ground control to request taxiway K lights to be turned off.

9.6.3.1.4. (Added) One crew member will monitor command post at all times during ground operations.

9.6.3.1.5. (Added) Crew will terminate operations with base operations and ground control.

9.11.2.7. (Added) For AFTO 781 purposes only (gear cycles), log each GOAT as a touch and go.

9.12. (Added) Local Training Airfields. Condensed information and procedures for local training airfields are available in the Charleston AFB Aircrew Flimsy. However, each aircrew must also perform a thorough review of information contained in the Airfield Suitability and Restrictions Report (ASRR), FLIP AP/1 Area Procedures, IFR Supplement, FCBs, and other applicable publications prior to flight. The PIC will also ensure full coordination with C2 and ATC agencies at the field of intended use. Use military fields to the maximum extent possible to accomplish training objectives.

9.13. (Added) Assault Landing Zone Operations. For unilateral training, assault landing zone procedures are limited to North Field, Lakehurst NAS, Moses Lake, Patrick AFB, and Altus AFB. Operational missions and JA/ATTs are unrestricted. Do not use assault landing zone procedures at civilian airfields, airfields without crash/fire rescue, or uncontrolled airfields. This does not preclude aircrews from flying full flap approaches at these airfields.

9.14. (Added) Combat Offload Training.

9.14.1. (Added) Combat Offloads at Charleston AFB. Combat offload pallets (COP) must be picked up immediately after offload operations are concluded. Crews will relay their intentions for combat offload training to command post at least 15 minutes prior to the event. Additionally, crews will call command post immediately after the combat offload is complete to confirm that aerial port is aware that the pallets have been offloaded and the location where the offload was accomplished.

9.14.1.1. (Added) Northern Location. Crews will back the aircraft far enough into the small taxiway leading to parking spots 88 and 89 to ensure the platforms will land before the main holding area for runway 15.

9.14.1.2. (Added) Southern Location. Crews will combat offload on taxiway K leading to the hot cargo area and ensure pallets land prior to taxiway D.

9.14.2. (Added) Combat Offloads at North Auxiliary Airfield (NAAF). In order to accomplish combat offload operations at NAAF, aircrews must coordinate with Charleston AFB current operations a minimum of one day prior. Approval for combat offload operations at NAAF is designated for each mission by appropriate remarks in the AOD. Only missions with these remarks are authorized to perform combat offloads at NAAF. Combat offload operations will only be conducted on Twy E in the designated Combat Offload area. The combat offload area is the first 500' of Twy E east of Twy D. Landings, GOATs and touch & go's on runway 05/23 are not permitted with aircraft or vehicles on Twy D or while aircraft are conducting combat offloads.

9.14.2.1. (Added) Prior to conducting combat offload operations, aircrews must advise the North Field Tower Controller (NFTC) or Landing Zone Safety Officer (LZSO) that a combat offload is planned. The NFTC/LZSO will shut down operations on runways 05/23 until combat offload operations are complete.

9.14.2.2. (Added) To conduct combat offloads at North Field, back the aircraft onto the combat offload area east of Twy D. Complete the combat offload and notify the NFTC/LZSO when clear of the combat offload area.

9.14.2.3. (Added) Once the combat offload is complete, APS personnel will obtain permission from NFTC/LZSO to enter the combat offload area. APS personnel will then conduct a Foreign Object Damage (FOD) inspection of the area and notify NFTC/LZSO that the combat offload area is clear of FOD and pallets. The NFTC/LZSO will then reopen runways 05/23.

9.14.2.4 (Added). APS personnel will inspect COPs to insure they are airlift transportable. Each COP is load planned/cargo manifested with actual weights for airlift back to KCHS on a local training sortie that night or the next day. APS will ship all COPs that are damaged during combat offload operations back to KCHS on a flat-bed trailer.

9.14.2.5. (Added) Aircrews designated to airlift COPs back to KCHS are designated in the remarks section of the AOD and notified by Charleston ATOC during the pre-mission cargo load brief or by NFTC/LZSO on the inbound leg to North Field. The primary location for uploads is the Combat Offload area or as designated by the NFTC/LASO. Aircrews should plan for an engine running onload of COPs at North Field. APS will use a bare tine forklift to onload the COPs. The loadmaster should configure the cargo compartment to C-1 with inboard ramp toes (low position) and ramp toe roller conveyors/guide rails installed for the onload.

9.15. (Added) Combat Offload Malfunctions . If a malfunction occurs during a combat offload, the crew will leave all switches in place and notify OGV before continuing operations. Include the following information in the 781 write up: specific lock #, floor configuration, LM panel switch configuration, indications, and sequence of events. This data, along with a detailed write up, will expedite the trouble shooting process and allow maintenance to compile trend data on the aircraft rail/locks.

9.16. (Added) Local Low Level Training

9.16.1. (Added) Crews will conduct all training flights planned below 1,500 feet AGL on published military training routes (MTRs), locally developed routes (e.g. BUDA routes) or “one-time” VFR low-level routes approved by the Weapons and Tactics Flight (437 OSS/OSK). OSK may approve one-time VFR low-level routes to as low as 300 feet AGL. Submit one-time VFR low-level routes to OSK at least one duty day prior to home station departure. Only an instructor qualified tactics planner may grant approval. Special Operations (OGS) is responsible for approving one-time VFR special operations low-level routes below 1,500 feet AGL.

9.16.2. (Added) Restricted area R-3004 (15 miles west of Bush Field) is not depicted on TPC or ONC products because it is activated by NOTAM. Low-level training routes published in the 437 AW Aircrew Flimsy remain outside of R3004. Aircrews however, must be aware of the location of R-3004 to avoid entering a potentially active restricted area.

9.17. (Added) Local Airdrop Training

9.17.1. (Added) Container Delivery System (CDS) Airdrop. 437/315 AW aircrews are limited to a minimum CDS drop altitude of 550 feet AGL on formation airdrops for any training mission (JA/ATT & local). For single-ship operations, comply with AFI 11-231, *Computed Air Release Point Procedures*.

9.17.2. (Added) Discrete Interplane. Aircrews should use “Have Quick or Secure Voice” for interplane communications during all formation flights. Charleston local training flights will use 314.45. Local SOP training sorties will use 340.6 or 141.7. Off-station training (non-local) and missions require de-conflicted SKE and interplane frequencies; contact 437 OSS/OSK or the Spectrum Manager at 618 TACC, DSN 779-3232.

9.17.3. (Added) North Auxiliary Field Restrictions. For unilateral training, the aircrew must visually acquire all North Field DZs for execution of actual airdrops.

9.17.4. (Added) Station Keeping Equipment (SKE). SKE frequency and slot numbers for all formations departing Charleston AFB are assigned in the “General Remarks” section of the wing AOD.

9.18. (Added) Local Trainer Cargo Offload. Local trainers will call command post approximately 30 minutes prior to estimated block time with cargo offload requirements. Crew duty day permitting, loadmasters will remain at the aircraft up to 30 minutes after block-in for APS to arrive. Approval for APEX download is an Aerial Port management function. If APS does not show after 30-minutes, contact command post for release or further guidance. *Note:* Airdrop training loads cannot be offloaded using APEX procedures.

11.1.3.2.1. (Added) For short-notice missions, late-notice mission changes or when web-based access is not available, the Charleston Command Post duty officer has access to a Jeppesen publication account and can provide assistance with required Jeppesen products.

11.5.1. When a mission history download is required (i.e., navigation anomaly), label each computer disc with the mission number and date. The mission computer IDENT for each mission history file will use the following naming convention: first and last name initials of the PIC followed by the three-digit Julian day (i.e., JP123). In the event of two mission history download requirements during the same Julian day, append the IDENT with the suffix “B” (i.e.,

JP123B). Turn these into the ARMO (437 AW) or WOC (315 AW) where they will be kept for 120 days.

12.4.1.2. (Added) Aircrews will review and be familiar with T.O. 00-25-172, Ground Servicing of Aircraft and Static Grounding/Bonding, prior to conducting fuel servicing without a crew chief or qualified maintenance personnel.

12.4.1.3. (Added) Fuel Drainage. Drain the SPR only if the drained fuel can be disposed of safely. If not drained, make an entry in the aircraft forms and place the aircraft on a RED DIAGONAL.

12.4.2.1. (Added) If used during refueling, the APU must already be started and running in a stable condition prior to pressurizing the fuel system.

12.9. (Added) Ram Air Turbine (RAT) Check Procedures. Aircrews are authorized to perform the RAT extension check in accordance with the procedures listed in T.O. 1C-17A-6CF-1, *Acceptance and Functional Check Flight Procedures Manual*. A copy of this T.O. will be provided to the aircrew by maintenance personnel upon arrival at the aircraft. The following additional restrictions apply:

12.9.1. (Added) A RAT flight check requires a current and qualified instructor pilot on the aircraft.

12.9.2. (Added) Do not flight check the RAT when landing crosswinds exceed 15 knots or landing gross weight exceeds 400,000 lb.

13.4.1.1.1.1. (Added) If the operating loadmaster identifies discrepancies that will require repositioning or downloading of cargo, the on-station evaluator/shift supervisor will be notified immediately and deficiencies corrected.

13.8.3. (Added) The following personnel are also authorized to carry weapons on our aircraft:

13.8.3.1. (Added) State Department couriers, so identified by diplomatic passport, and DCS (Defense Courier Service) couriers possessing DCS Form 9, Defense Courier Service Identification Card, when such members have been designated as security guards, may carry loaded weapons.

13.8.3.2. (Added) Properly identified federal law enforcement officials may carry loaded weapons aboard military aircraft. Proper identification presented by civilian federal law enforcement will suffice as authority to carry weapons.

13.8.3.3. (Added) Positioning/De-positioning AMC aircrew members on presentation of flight orders and AF Form 523, *USAF Authorization to Bear Firearms*, may carry *unloaded* weapons aboard AMC military aircraft.

13.8.3.4. (Added) Couriers and escorts NOT associated with either DCS or the State Department and who are authorized to carry weapons as stated in their orders are required after boarding the aircraft to temporarily relinquish both weapons and ammunition to the custody of the PIC or representative until arrival at the destination. This requirement also applies to armed guards accompanying prisoners and Accounting and Finance Office guards.

13.8.3.5. (Added) Aerial Port Squadron (APS) is responsible for advising the PIC or representative that passengers will be boarding with firearms.

16.3.1. (Added) Tactical Mission Planning System Management. Tactics, 437 OSS/OSK, is responsible for mission planning system hardware and software management. Detailed procedures and processes are maintained by Tybrin Systems.

16.3.2. (Added) OSK manages and maintains prefabricated software files and databases for all local military training routes (MTR). Files are available for Falconview/CFPS upload or pre-formatted "jet disk" files for direct upload into the aircraft. A document file summarizing the data content of each disk is also provided. This file indicates the name and squadron responsible for the information, AP/1B and CHUM expiration dates, Shaw AFB Read File posting date, and the last reviewed date.

16.4.2.1. (Added) For Block 17 aircraft, enter a RNP value of 1 into the low level segment. Crews will immediately climb to an altitude at or above MSA whenever an UNABLE RNP message is annunciated.

16.4.3.1. (Added) For Block 17 aircraft, enter a RNP value of 1 into the low level segment. Crews will immediately climb to an altitude at or above MSA whenever an UNABLE RNP message is annunciated.

16.8.1. (Added) Pilots will review navigational checkpoints, obstructions, emergency escape actions, and conduct a thorough objective area/target study including the location of initial point for all missions.

16.8.2. (Added) For airdrop missions, pilots will review drop parameters and no drop criteria for each airdrop.

17.5.1. (Added) Crews should maximize the use of ground navigational aids, aircraft automation, and chummed charts to ensure clearance from terrain and obstacles within 10 NM of the arrival airfield.

17.6.2.1. (Added) Terminate NVG backing operations if the loadmaster's NVG malfunctions and ambient lighting is insufficient to continue the operation. Maintain a clear definition of the taxiways/runway edge or parking ramp and obstructions throughout the operation. During forward taxi operations, the loadmaster may provide additional instructions or clearance feedback for the pilots while stationed at the troop doors or from the aircraft ramp.

17.8. (Added) Defensive Systems. PICs must check the SPINS, VRAD and OPOD and assess any briefed threats to determine appropriate defensive system employment and minimum number of flares required for the mission.

17.8.1. (Added) All aircrew members will remain outside a 50-foot radius from the aircraft during actual loading or unloading of munitions into the CMDS.

17.8.2. (Added) Do not use Halon or water-type fire extinguishers on fires involving pyrotechnics or magnesium incendiaries due to the risk of explosion. These extinguishers may be used on incidental fires in the surrounding areas.

17.8.3. (Added) Aircraft configured with flares for subsequent missions may fly local training sorties with flares installed provided:

17.8.3.1. (Added) The safety switch pins are verified installed.

17.8.3.2. (Added) The Countermeasure Defensive Systems (CMDs) and MWS are left in the off position. If LAIRCM will be used during the training mission, ensure the MWS/IRCM switch is in the MWS position.

19.2.3. (Added) Pole Knife.

19.2.3.1. (Added) PICs will ensure the Fulton pole knife assembly is carried onboard the aircraft for all heavy equipment airdrop operations. Pole knife assemblies are checked out at the ARMO (437 AW) or WOC (315 AW).

19.2.3.2. (Added) Loadmasters will identify and mark any pole knife that is unserviceable.

19.2.3.3. (Added) A pole knife is positioned at Pope AFB in case the onboard pole knife signed out at home station is unserviceable, or if a change in mission tasking occurs while at Pope. Aircrew requiring this pole knife should contact the Pope AFB Tactics Office (DSN 424-7668/8289) during normal duty hours. After normal duty hours, Pope Command Post will contact the on call Tactics representative. Return the pole knife to Pope Tactics before departing Pope AFB.

19.3.3. (Added) Taping of the Paratroop Door/Jump Lights During Personnel Airdrop.

19.3.3.1. (Added) Follow the procedures for inspecting paratroop doors in the Personnel Airdrop Preparation and Loading Checklist (Dash-1). If the door is in need of repair, turn it over to maintenance or do not drop from that door. Maintenance has specific procedures (TCTO) for repairing the door that requires an epoxy based filler, not speed tape. Do not use tape to cover an area that does not pass the inspection.

19.3.3.2. (Added) Do not allow the user to put tape on the paratroop door. If the jumpmaster or safety has an area of concern with the door they can reject it and not jump.

19.3.3.3. (Added) Do not allow the user to tape over any of the jump lights. Use the Aft LM Panel jump signal dimming rheostat to reduce the jump signal lights intensity.

19.4.2. (Added) Block 17 aircraft, lead will set RNP value for airdrop operations to 150 yards (or less). The mission computer default value is 100 yards. In IMC, lead may descend to IMC drop altitude and accomplish IMC airdrop as long as there are no UNABLE RNP messages.

19.7.7. (Added) Mandatory Briefing Items. If a descent below the MEA or IFR minimum vectoring altitude is required to attain drop altitude in IMC; include the following information as part of the tactical briefing or serial update briefing:

19.7.7.1. (Added) Locations of the DZ entry, earliest descent, latest decent, and DZ exit points.

19.7.7.2. (Added) The locations and elevations of the controlling obstacles used to determine the drop altitude and the DZ entry and exit points.

19.11.3. (Added) CARP Verification Procedures.

19.11.3.1. (Added) Pilots will coordinate no drop parameters prior to each airdrop mission.

19.11.3.2. (Added) Aircrews will carry an accurate DZ mosaic with a grid to plot CARPs for all actual airdrops, unless operational necessity dictates otherwise. When the use of a DZ mosaic is impractical, mission commanders/PICs will ensure a detailed route study using the most appropriate chart is accomplished.

19.11.3.2.1. (Added) Plot the MC-computed CARP with reference to the grid overlay. This position should be correlated with ground references, reviewed by both pilots and used to back up MC performance. This procedure does not constitute a visual drop, but is merely a way to visually identify the MC-generated CARP. Update the CARP and ground references for each airdrop pass.

19.11.3.2.2. (Added) If the aircraft flight director course guidance is not tracking to the plotted release point, as confirmed by visual ground references, or when the aircraft arrives at the plotted release point and the MC has not begun the airdrop sequence (CAWS counting or HUD countdown in progress), the crew will initiate a no-drop. Annotate the MC FOM and the NAV ERR/ANP figures on the AD PROGRESS page. Further airdrops may be attempted if the source of the navigation error can be identified and deselected for update. Notify 437 OSS/OSK and 437 OG/OGV as soon as possible after the mission.

19.14. (Added) Data Verification .

19.14.1. (Added) One pilot will enter all airdrop data into the mission computer. Another airdrop pilot will verify the data.

19.14.2. (Added) Crews will verify all PI coordinates (surveyed vs. user requested) are within the boundaries of the drop zone (i.e. plot on PFPS), unless operational necessity dictates otherwise.

19.15. (Added) Conversion of DZ Coordinates in the C-17.

19.15.1. (Added) The C-17 MC coordinates are aligned and displayed in WGS-84 datum/spheroid; the C-17 does not accept coordinates in any other format. Thus, coordinates in any other system, such as Clarke 1866, are assumed to be WGS-84 and can be several hundred yards off. The POSITION CONVERSION page of the MC does not convert a coordinate from one datum/spheroid to another. It merely converts a lat/long coordinate to a UTM coordinate, within the same datum/spheroid.

19.15.2. (Added) CFPS provides a simple and quick method to convert coordinates from one spheroid/datum to another using the "GEO-Coordinate Conversion" page (A complete description of how to use this function is available on the tactics web page.)

19.15.3. (Added) All crews using DZ surveys with coordinates other than WGS-84 will use CFPS or GEOTRANS software to convert the coordinates to WGS-84. Confirm the coordinates with a Weapons Officer, wing tactics pilot or airdrop instructor pilot prior to mission execution.

19.16. (Added) Dry Pass Door Operations. Opening the doors for dry passes is accomplished at the discretion of the mission commander/PIC.

19.17. (Added) Malfunctions/Off-DZ Drops.

19.17.1. (Added) If a malfunction or an off DZ drop occurs, aircrews will immediately notify the nearest command and control center. For airdrops in the local Charleston area, Charleston Command Post will initiate the quick response checklist (QRC) and contact the on-call OSS/OSK and OG/OGV representatives, aerial delivery contractor, AF JAI, maintenance specialist, and AW/SEF. If the malfunction occurs during a SOLL II flight, Command Post will also notify the OG/OGS on call representative. OSK will determine whether an aircraft inspection is required before subsequent flights. The aircrew will not airdrop again until cleared by OSK and OGV.

19.17.2. (Added) An airdrop malfunction is defined as any complete or partial failure of:

19.17.2.1. (Added) The aircraft airdrop system.

19.17.2.2. (Added) Any piece of airdrop equipment.

19.17.2.3. (Added) Personnel or cargo rigging to function as designed before or after the drop regardless of the after-impact condition of the individual or equipment.

19.17.2.4. (Added) Serious injury or death to a crewmember or other personnel. Serious injury for ground personnel is defined by the Ground Forces Commander

19.17.2.5. (Added) Damage to aircraft equipment or aircraft structure.

19.17.2.6. (Added) Damage to the airdrop load or related airdrop equipment.

19.17.3. (Added) Unless a greater hazard exists that would risk injury to personnel or cause further damage to the aircraft, crews will not de-rig the aircraft or reposition or adjust the airdrop systems or equipment. Record the complete mission computer Airdrop Recall page and download the mission history. Unless advised otherwise by OSK or OGV, terminate the actual airdrop portion of the mission and return to the nearest base where assistance can be received.

19.17.4. (Added) On unilateral training missions at North AAF when an airdrop malfunction occurs with no damage to equipment or personnel, aircrews must get approval from OSK and OGV to continue with air/land training before returning to Charleston. **EXCEPTION:** During training missions, if a drogue malfunction due to “cigar rolling” or blown panels occurs and the crew is able to successfully jettison the drogue without using the emergency drogue jettison switch, the mission may continue, including further airdrops, with the concurrence of the mission commander/PIC.

19.17.5. (Added) Use the DD Form 1748-2, *Joint Airdrop Malfunction Report* (Personnel-Cargo), to report airdrop malfunctions and incidents. Aircrews will describe the malfunction and/or incident in as much detail as possible.

19.17.6. (Added) All airdrop system malfunctions and damage to equipment require an entry in the AFTO Form 781. Mark or tag any malfunctioning ADS component or damage to the aircraft or its equipment so that it can be inspected, corrected and repaired by maintenance personnel.

19.17.7. (Added) Attach the mosaic/stick diagram, mission computer Airdrop Recall data, mission history disk, weather sheet, crew orders, load plan, DD Form 365-4, *Weight and Balance Clearance--Transport*, DD Form 1748, *Joint Airdrop Inspection Record* (Platforms), and release point coordinates (for cut-away chutes or jettisoned loads) to the DD Form 1748-2 and deliver the package to OSK for all airdrop malfunctions immediately upon landing and prior to entering post mission crew rest.

19.18. (Added) Formation Debrief. All pilots will attend the formation debrief. If a malfunction or incident occurs, the loadmaster involved will also attend.

19.19. Prescribed and Adopted Forms:

19.19.1. Prescribed Forms: No Forms Prescribed

19.19. 2 Adopted Forms:

AF IMT 847, *Recommendation for Change of Publication*

AF IMT Form 4031, *CRM Skills Criteria Training/Evaluation Form*
AF IMT 4327a, *Flight Authorization (PA)*
AF Form 523, *Authorization to Bear Firearms*
AF Form 664, *Aircraft Fuels Documentation Log*
AF Form 853, *Air Force Strike Report*
AF Form 1199, *Restricted Area Badge*
AF Form 1631, *NATO Travel Orders*
AFTO Form 781, *ARMS Aircrew/Mission Flight Data Document*
AFTO Form 781A, *Maintenance Discrepancy and Work Document*
AMC Form 97, *In-Flight Emergency and Unusual Occurrence Worksheet*
DCS Form 9, *Defense Courier Service Identification Card*
DD Form 175, *Military Flight Plan*
DD Form 365-4, *Weight and Balance Clearance—Transport*
DD Form 1748, *Joint Airdrop Inspection Record*
DD Form 1748-2, *Airdrop Malfunction Report*
DD Form 2131, *Passenger Manifest*
DD Form 2796, *Deployment Health*
SF 153, *COMSEC Material Report*

JOHN C. MILLANDER, Colonel, USAF
Commander, 437th Airlift Wing

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 11-2C-17V3, *C-17 Operations Procedures*, 15 December 2005
AFI 91-202, AMCSUP1, *USAF Mishap Prevention Program*, 31 August 2004
AFI 65-103, *Administrative Orders (PA)*, 5 August 2005
AFI 11-231, *Computed Air Release Point Procedures*, 31 August 2005
AFPD 11-2, *Aircraft Rules and Procedures*, 14 January 2005
AFMAN 33-363, *Management of Records*, 1 March 2008
315 AW Instruction 11-401, *Mission Essential Ground Personnel Requests*, 20 February 2008
CAFBI 21-301, *Aircraft Engine Run Policy*, 1 April 2005
CAFBI 24-301, *Flight line Driving*, 1 August 2005
T.O. 00-25-172, *Ground/Bonding*, 10 November 2009

Abbreviations and Acronyms

AHAS— Avian Hazard Advisory System
AOD— Air Order of the Day
ARMO— Aviation Resource Management Office
ARMS— Aviation Resource Management System
BAM— Bird Avoidance Model
BWC— Bird Watch Condition
CMDS— Counter Measure Defensive Systems
COP— Combat Offload Pallet
CRM— Crew Resource Management
EOD— Explosive Ordnance Division
EPOS— Emergency Passenger Oxygen System
ERCC— Engine Running Crew Change
FCB— Flight Crew Bulletin
FCC— Flying Crew Chiefs
IEU— Individual Equipment Unit
LAIRCM— Large Aircraft Infrared Countermeasures
LZCO— Landing Zone Safety Officer
MEP— Mission Essential Personnel

MPD— Mobility Pilot Development

MRE— Meals Ready to Eat

NFTC— North Field Tower Controller

TAAR— Tactics After-Actions Report

WOP— Wing Operations Plan